ABSTRACT OF THE DISCLOSURE

An average value of dimensions of resist patterns formed each time exposure processing is effected on semiconductor substrates of a predetermined number of lots, is compared with a target dimension. When a drift between each of the dimensions of the formed resist patterns and the target dimension is larger than a first value, exposure energy is corrected with a relatively large correction value α_1 . When the drift between each of the dimensions of the formed resist patterns and the target dimension is smaller than the first value and larger than a second value, exposure energy is corrected with a relatively small correction value α_2 . When the drift between each of the dimensions of the formed resist patterns and the target dimension is smaller than the second value, no exposure energy is corrected. Exposure processing is effected on a semiconductor substrate of the next lot by using the calculated exposure energy.